

**EUROPEAN PATENT OFFICE**

# Patent Abstracts of Japan

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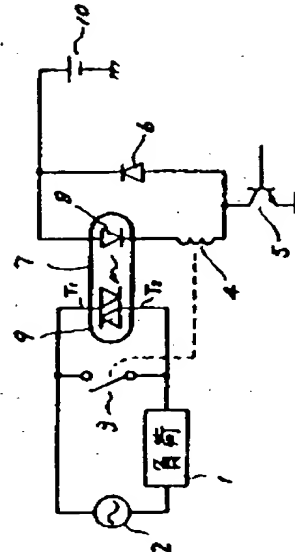
APPLICATION DATE : 10-06-88  
APPLICATION NUMBER : 63144001

APPLICANT : MATSUSHITA ELECTRIC IND CO LTD;

INVENTOR : GANJI NOBUO;

INT.CL. : H01H 9/56

TITLE : SWITCH



**ABSTRACT :** PURPOSE: To prevent damage on a relay contact so as to extend the service life by parallelly connecting a diode to a serial circuit of a relay coil and a relay current detector means.

**CONSTITUTION:** A current flow from a DC power supply to a relay coil 4 through a light emitting diode (relay coil current detection means 8) of light trigger type bi-directional thyristor 7 and a transistor 5 (switching element). A diode 6 is connected parallelly to a serial circuit of the coil 4 and the diode 8. Discharge between side path of intruded current and contact is thus prevented when a thyristor 9 connected parallelly is turned ON upon open/close operation of a relay contact 3. It is thus possible to prevent the contact from being damaged.

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